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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/090,510	03/04/2002	Philip J. Mott	BW-DKT00080A	6034
32175	7590	09/17/2004	EXAMINER	
BORGWARNER INC. POWERTRAIN TECHNICAL CENTER 3800 AUTOMATION AVENUE, SUITE 100 AUBURN HILLS, MI 48326-1782			VAN PELT, BRADLEY J	
		ART UNIT	PAPER NUMBER	3682

DATE MAILED: 09/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/090,510	MOTT ET AL. <i>CF</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	Bradley J Van Pelt	3682	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 29 December 2003.
- 2a) This action is FINAL.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-7 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-7 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    - a) All    b) Some \* c) None of:
      1. Certified copies of the priority documents have been received.
      2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
      3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____.   |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____.  | 6) <input type="checkbox"/> Other: _____.                                   |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 2, 5, 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh (USPN 4,4042,676) in view of Nagin (USPN 3,672,237).

McIntosh discloses a chain for transmission of power from a driving sprocket having teeth to a driven sprocket having teeth comprising: a) a plurality of sprocket-engaged blocks (18) having a body with sides and a thickness therebetween, an upper surface and teeth opposite the upper surface, adapted to engage with the teeth of the driving sprocket and the teeth of the driven sprocket; b) a plurality of guide links (22), each guide link having a body with a thickness, a top surface, a bottom surface, a leading end and a trailing end; each guide link being movably fastened in pairs on opposite sides of the sprocket-engaging blocks to two adjoining sprocket engaging blocks, the guide links being dimensioned so that when the guide links and sprocket-engaging blocks are assembled, the top surfaces of the guide links project further than the top surfaces of the sprocket-engaging blocks, forming rails defining a trough therebetween; all of the guide links and sprocket-engaging blocks fastened together forming a continuous chain; and c) a retaining band (30) running around the chain in the trough, contacting the upper surface of the sprocket engaging blocks; so that when the chain is engaged with the driven sprocket and the

driving sprocket, and rotational force is applied to the driven sprocket, the force is transferred by the teeth of the driving sprocket to the sprocket-engaging blocks engaged with the driving sprocket,

the guide links are fastened together around the sprocket-engaging blocks by pins (column 2 line 7) running through holes in the guide links and the sprocket-engaging blocks; the retaining band is made of a polymer (see column 2, line 28); the guide link comprises a tapered area forming a lower part of the leading end and trailing end (see fig. 3), to provide clearance as the chain wraps around the sprockets.

McIntosh does not disclose a compression-type chain, when the guide links are aligned in a straight line between the driving sprocket and the driven sprocket the leading end of a guide link contacts the trailing end of an adjoining link, and the leading end and trailing end of the guide links are substantially flat, nor force is transferred to the trailing end of the next guide link from the leading end, until the force is transferred to the sprocket-engaging blocks engaged with the driven sprocket, and thence as a rotational force to the driven sprocket.

Nagin shows a compression-type chain and when the guide links are aligned in a straight line, the leading end of a guide link contacts the trailing end of an adjoining link, and the leading end and trailing end of the guide links are substantially flat (see fig. 1) where force is transferred from leading to trailing ends of the guide links.

To modify the apparatus of McIntosh so as to provide a compression-type chain such that the contacting guide links contact each other when the chain is aligned in a straight line would have been obvious to one of ordinary skill in the art at the time the invention was made in view

of the teachings of Nagin that such an arrangement improves the compression characteristics of the chain.

3. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh in view of Nagin, as applied to claims 1, 2, 5, and 7, further in view of Henderson (USPN 4,595,385).

The above reference combination shows all of the instantly claimed invention, except a plurality of pins running between the pairs of guide links in the trough, retaining the band therein.

Henderson shows disclose a leading end of a guide link contacts the trailing end of an adjoining link a plurality of pins (67) running between the pairs of guide links (ends are considered guide links) in a trough (area between), retaining a band (34) therein.

To modify the above reference combination so as to provide pins between pairs of guides links would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Henderson that such an arrangement improves the retaining characteristics of the band within the chain (see column 6, lines 43-45 of Henderson).

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over McIntosh in view of Nagin, as applied to claims 1, 2, 5, and 7, further in view of Mott (USPN 5,993,345).

McIntosh discloses a steel band (see column 2, line 27); however fails to show the retaining band comprises a plurality of laminations of steel band.

Mott shows a retaining band (106) comprises a plurality of laminations of steel band.

To modify the above reference combination so as to include laminations of a steel band would have been obvious to one of ordinary skill in the art at the time the invention was made in view of the teachings of Mott that such an arrangement improves loading properties of the chain.

***Response to Arguments***

5. Applicant's arguments filed June 6, 2004 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

BJVP 

  
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